

WHAT IS CLAIMED IS:

1. A method of wiring a semiconductor integrated circuit, said semiconductor integrated circuit having a first layer and a second layer, the method comprising the steps of:

5 disposing a first wiring on said first layer and disposing a second wiring on said second layer, wherein said first and second wirings are disposed subject to a condition that a predetermined number of through-holes are set between said first and second wirings, and said first and second  
10 layers being electrically connected to each other;

searching for a setting area in one of said first and second layers, and an corresponding area in the other of said first and second layers as a projection area of the setting area, that enable a setting of new other through-hole  
15 between said first and second wiring that have been determined; and

setting the new other through-hole between said setting area and said corresponding area.

20 2. The method of wiring a semiconductor integrated circuit according to claim 1, wherein

at the through-hole setting step, the shape of said new other through-hole is the same as the shape of said through-hole that has been set at the wiring step.

25

3. The method of wiring a semiconductor integrated circuit according to claim 1, wherein

at the through-hole setting step, the shape of said new other through-hole is decided based on a shape of said setting area.

4. A method of wiring a semiconductor integrated circuit, said semiconductor integrated circuit having a first layer and a second layer, the method comprising:

a first wiring step of disposing a first wiring on said first layer and disposing a second wiring on said second layer, wherein said first and second wirings are disposed subject to a condition that a predetermined number of through-holes are set between said first and second wirings, and said first and second layers being electrically connected to each other;

an area searching step of searching for a setting area in said first layer, and an corresponding area in said second layer as a projection area of the setting area, that enable a setting of new other through-hole between said first and second wiring that have been determined;

a second wiring step of disposing an additional wiring for setting the other through-hole in either said searched setting area or said searched corresponding area; and

a through-hole setting step of setting the new other

through-hole between said setting area and said corresponding area.

5. The method of wiring a semiconductor integrated circuit according to claim 4, wherein

at the area searching step, the search is made under a condition that said setting area that is searched for is a part of the area in which said first wiring has been disposed, and that said corresponding area that is searched for is an area that is close to said second wiring and the area in which no wiring or circuit element exists, and

at the second wiring step, said second wiring is extended to said corresponding area.

6. The method of wiring a semiconductor integrated circuit according to claim 4, wherein

at the area searching step, the search is made under a condition that said setting area that is searched for is an area that is close to said first wiring on said first layer, and the area in which no wiring or circuit element exists, and that said corresponding area that is searched for is an area that is close to said second wiring on said second layer, and the area in which no wiring or circuit element exists, and

at the second wiring step, said first wiring on said

first layer is extended to said setting area, and said second wiring on said second layer is extended to said corresponding area.

- 5 7. The method of wiring a semiconductor integrated circuit according to claim 4, wherein

at the through-hole setting step, the shape of said new other through-hole is the same as the shape of said through-hole that has been set at the first wiring step.

10

8. The method of wiring a semiconductor integrated circuit according to claim 4, wherein

at the through-hole setting step, the shape of said new other through-hole is decided based on a shape of said setting area.

15

9. A semiconductor integrated circuit comprising:

a multi-layer structure including a first layer and a second layer;

20

a setting area disposed on said first layer;

a corresponding layer disposed on said second layer as a projection area of said setting area; and

25

a through-hole which connects between said setting area and said corresponding area, said through-hole having a shape corresponding to the shapes of said setting area

and said corresponding area.

10. A computer program containing instructions which when executed on a computer causes the computer to realize a method  
5 of wiring a semiconductor integrated circuit, said semiconductor integrated circuit having a first layer and a second layer, the method comprising the steps of:

disposing a first wiring on said first layer and disposing a second wiring on said second layer, wherein said  
10 first and second wirings are disposed subject to a condition that a predetermined number of through-holes are set between said first and second wirings, and said first and second layers being electrically connected to each other;

searching for a setting area in one of said first and  
15 second layers, and an corresponding area in the other of said first and second layers as a projection area of the setting area, that enable a setting of new other through-hole between said first and second wiring that have been determined; and

20 setting the new other through-hole between said setting area and said corresponding area.

11. A computer program containing instructions which when executed on a computer causes the computer to realize a method  
25 of wiring a semiconductor integrated circuit, said

semiconductor integrated circuit having a first layer and a second layer, the method comprising the steps of:

5 a first wiring step of disposing a first wiring on said first layer and disposing a second wiring on said second layer, wherein said first and second wirings are disposed subject to a condition that a predetermined number of through-holes are set between said first and second wirings, and said first and second layers being electrically connected to each other;

10 an area searching step of searching for a setting area in said first layer, and an corresponding area in said second layer as a projection area of the setting area, that enable a setting of new other through-hole between said first and second wiring that have been determined;

15 a second wiring step of disposing an additional wiring for setting the other through-hole in either said searched setting area or said searched corresponding area; and

a through-hole setting step of setting the new other through-hole between said setting area and said  
20 corresponding area.